## **REMARKS**

## Reconsideration And Allowance Are Respectfully Requested.

Claims 1-8 are currently pending. Claims 9-19 have been canceled based upon the prior restriction/election requirement. Claim 1 has been amended. No new matter has been added. No new claims have been added. Reconsideration is respectfully requested.

Applicants would first like to thank Primary Examiner Behrend for the courtesies extended during the interview conducted on March 21, 2002. During the course of this interview, proposed amendments to claim 1 were discussed as they relate to the prior art of record. Unfortunately, no agreement was reached as to amended claim 1 overcoming the prior art of record.

With regard to the rejections based upon prior art, claims 1-6 stand rejected under 35 U. S. C. 102 as being clearly anticipated by either U.S. Patent No. 3,515,625 to Sedlak et al. (Sedlak), U.S. Patent No. 3,864,124 to Breton et al. (Breton) or British Patent No. 954,594 to Weinberger et al. (Weinberger). In addition, claims 1-7 stand rejected under 35 U. S. C. 103 as being unpatentable over either Breton or Weinberger. In addition, claim 7 stands rejected under 35 U. S. C. 102 as being clearly anticipated by Sedlak. Finally, claims 1-8 stand rejected under 35 U. S. C. 103 as being unpatentable over at Breton, Sedlak or Weinberger in view of U.S. Patent No. 3,675,061 to Harrison (Harrison), U.S. Patent No. 2,175,283 to Cote (Cote), U.S. Patent No. 4,748,062 to Fry et al. (Fry et al.) and/or U.S. Patent No. 4,857,371 2 McClintock

In view of the outstanding rejections, Applicants have amended claim 1 so as to further define the molded shield forming the basis for the present invention. Specifically amended claim 1 defines a molded shield for a source of gamma rays. The molded shield includes a cylindrical body

having a cavity shaped and dimensioned to receive a source of gamma rays. The cylindrical body includes a core layer of cured liquid silicone resin loaded with particulate of gamma radiation-shielding material adapted to surround the radiation source positioned within the cavity defined by the cylindrical body. The core layer is located between two outer layers of solid polymeric material.

In contrast to the claimed invention, Breton, Sedlak and Weinberger disclose various radiation shields wherein a radiation shielding material is embedded within a silicone shell.

However, neither Breton, Sedlak or Weinberger disclose a molded shield having a cylindrical body which defines a cavity that is shaped and dimensioned to receive a source of radiation.

In attempting to overcome this deficiency in the prior art, the Office Action cites Harrison, McClintock, Cote and Fry as showing cylindrical covering devices which may be wrapped around a source. However, neither Harrison, McClintock, Cote or Fry discloses a shield which is embedded with a radiation shielding material.

In establishing the law governing obviousness-type rejections, the Supreme Court in *Graham v John Deere*, 383 U.S. 1, 148 USPQ 459 (1966), stated:

Under § 103, the scope and content of the prior art are to be determined; differences between the prior art and the claims at issue are to be ascertained; and the level of ordinary skill in the pertinent art resolved. Against this background, the obviousness or nonobviousness of the subject matter is determined. Such secondary considerations as commercial success, long felt but unsolved needs, failure of others, etc., might be utilized to give light to the circumstances surrounding the origin of the subject matter sought to be patented. As indicia of obviousness or nonobviousness, these inquires may have relevancy. . This in not to say, however, that there will not be difficulties in applying the nonobviousness test. What is obvious is not a question upon which there is likely to be uniformity of thought in every given factual context. The difficulties, however, are comparable to those encountered daily by the courts in such frames of reference as negligence and scienter, and should be

amenable to a case-by-case development. We believe that strict observance of the requirements laid down here will result in that uniformity and definitiveness which Congress called for in the 1952 Act.

With the foregoing in mind, the U.S. Patent & Trademark Office has determined that a prima facie case of obviousness is established by meeting three basic criteria. First, the Examiner must show some suggestion or motivation to modify the reference or to combine reference teachings. Second, the Examiner must show a reasonable expectation of success in modifying the primary reference based upon the teachings of the prior art. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. Support for the proposed modification and the reasonable expectation of success must be found in the prior art. MPEP 706.02(j). It has further been determined that "[w]here a reference is relied on to support a rejection, whether or not in a minor capacity, that reference should be positively included in the statement of the rejection." See *In re Hoch*, 428 F.2d 1341, 1342 n.3 166 USPQ 406, 407 n. 3 (CCPA 1970).

It is Applicants' opinion that the combination suggested in the Office Action for reading upon a cylindrical body utilized as a gamma radiation shielding device is unsupported by the prior art of record and must certainly be based upon impermissible hindsight. Specifically, the modification suggested by the Examiner is neither explicitly nor implicitly suggested in the prior art as required by case law and the rules of the U.S. Patent Trademark Office.

As the prior art fails to provide a suggestion for modifying the cited references so as to read upon the pending claims, it is Applicants' opinion that amended claim 1 overcomes the prior art of record and Applicants respectfully request that the rejection thereof be withdrawn. With regard to those claims dependent upon independent claim 1, they are believed to overcome the prior art of

record for the reasons discussed above with regard to amended claim 1. As such, Applicants

respectfully request that the rejection of these claims also be withdrawn.

Attached hereto is a marked up version of the changes made to the specification and claims by the current amendment. The attached page is captioned "Version With Markings To Show Changes Made".

It is believed that this case is in condition for allowance and reconsideration thereof and early issuance is respectfully requested. If it is felt that an interview would expedite prosecution of this application, please do not hesitate to contact applicants' representative at the below number.

Respectfully submitted,

Howard N. Flaxman

Registration No. 34,595

WELSH & FLAXMAN LLC 2341 Jefferson Davis Hwy., Ste. 112 Arlington, Virginia 22202 Telephone: (703) 920-1122

Docket No. ITW-12287

## **VERSION WITH MARKINGS TO SHOW CHANGES MADE**

## IN THE CLAIMS:

Amend claim 1 as follows:

(Amended) A molded shield for a source of γ-rays, comprising:
 <u>a cylindrical body having</u> [said shield defining] a cavity <u>shaped and dimensioned</u> to receive said source;

said [and] cylindrical body comprising a core layer of cured liquid silicone resin loaded with particulate  $\gamma$  radiation-shielding material adapted to surround a radiation source located in said cavity, said core layer being located between two outer layers of solid polymeric material.

Cancel claims 9-19 without prejudice.